IAP7 Rec'd PCT/PTO 21 JUL 2006

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) **CONCERNING A SUBMISSION UNDER 35 U.S.C. 371**

ATTORNEY'S DOCKET NUMBER 915-007.198

INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PRIORITY DATE CLAIMED PCT/IB2004/000164 January 22, 2004 January 22, 2004 TITLE OF INVENTION MIXER CIRCUIT APPLICANT(S) FOR DO/EO/US Jussi-Pekka TERVALUOTO, Antti RUHA, Tarmo RUOTSALAINEN Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. The US has been elected (Article 31). A copy of the International Application as filed (35 U.S.C. 371(c)(2)) is attached hereto (required only if not communicated by the International Bureau). b. X has been communicated by the International Bureau. is not required, as the application was filed in the United States Receiving Office (RO/US). An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4). Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: An Information Disclosure Statement under 37 CFR 1.97 and 1.98. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. A preliminary amendment. An Application Data Sheet under 37 CFR 1.76. A substitute specification. A power of attorney and/or change of address letter. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825. A second copy of the published International Application under 35 U.S.C. 154(d)(4). A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4),

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. Page 1 of 3

IAP6 Rec'd PCT/PTO 21 JUL 2006

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. APPLICATION PROPERTY SEPS CHET.S)			PCT/IB2004/000164		915-007.198	
	ems or information		/308, IPEA 409, I	IPEA 408, Res	ponse to Writte	en Opinion
The fellow	vina face have h	an aubmitted			L CALCURATIONS	DTO LICE ONLY
The following fees have been submitted 21. X Basic national fee (37 CFR 1.492(a))					\$ 200 00	PTO USE ONLY
	·	300.00				
If the written opinio	S indicates all cla	\$ 200.00				
If the written opinion IPEA/US in Search fee (37 CFI Internation Internation International Search	ndicates all claim R 1.445(a)(2)) ha al Searching Aut h Report prepare communicated to	\$ 400.00				
TOTAL OF 21, 22 and 23 =					900.00	
Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.						
Total Sheets	Extra Sheets	Number of each additional 50 or fraction RATE thereof (round up to a whole number)			·	
- 100 =	/50 =			x \$250	\$	
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).					\$	
CLAIMS	NUMB	ER FILED	NUMBER EXTRA	RATE	\$	
Total claims	12	- 20 =	0	x \$50	\$ 0	
Independent claims	3	- 3 =	0	x \$200	\$ O	
MULTIPLE DEPEN	IDENT CLAIM(S	\$				
<u> </u>		\$ 900.00				
Applicant claim	ns small entity st					
		\$ 900.00				
Processing fee of \$ claimed priority dat		\$				
		\$ 900.00				
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +					\$	
		\$ 900.00				
					Amount to be refunded:	\$
					Amount to be charged	\$

IAP6 Rec'd PCT/PTO 21 JUL 2006

PTO-1390 (Rev. 07-2005)
Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

a. X A check in the amount of \$ 900.00 to cover the above f	10./586995 ees is enclosed.					
b. Please charge my Deposit Account No in the amount of \$ A duplicate copy of this sheet is enclosed.	to cover the above fees.					
The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>2309442</u> . A duplicate copy of this sheet is enclosed.						
Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.						
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.						
SEND ALL CORRESPONDENCE TO: Customer No.: 004955	SIGNATURE Francis J. Maguire NAME 31,391 REGISTRATION NUMBER					

IAP6 Rec'd PCT/PTO 21 JUL 2006

IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

DOCKET OR REFERENCE NUMBER: REGARDING THE INTERNATIONAL APPLICATION OF: PCT/IB2004/000164 915-007.198 **ENTITLED:** MIXER CIRCUIT

Mail Stop PCT To The United States Designated/Elected Office (DO/EO/US) Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

NATIONAL STAGE EXPRESS MAIL CERTIFICATE

"Express Mail" label number: EV 914769053 US

Date of Deposit:

I hereby certify that the following attached papers or fee

Transmittal Letter to the U.S. Designated/Elected Office (DO/EO/US) **Preliminary Amendment** Copy of Intl. App. as published under WO 2005/081398 on September 1, 2005 front page, 17 pages specification, 3 pages claims, 1 abstract, 5 pages drawings Information Disclosure Statement, International Search Report, PTO-Form 1449 PCT/IB/308, IPEA 409, IPEA 408 Response to Written Opinion dated Check for \$ 900.00 for payment of fees Self addressed stamped return postcard

21 JULY 2006

Are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop PCT, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Typed or printed name of person mailing paper or fee)

Lorraine F. Kniffin 7/21/06

(Signature of person mailing paper or fee)

Each paper letter or communication relating to an international application during the international stage for which a date of filing is to be obtained as of the date of mailing must have its own certificate and the "Express Mail" label number as a part thereof or attached thereto. When, as here, the certification is presented on a separate sheet, that sheet must (1) be signed and (2) fully identify and be securely attached to the paper or fee it accompanies. Identification should include the serial number and filing date of the application as well as the type of paper being filed, e.g. complete application, specification and drawings, responses to rejection or refusal, notice of appeal, etc. If the serial number of the application is not known, the identification should include at least the name of the inventors (s) and the title of the invention.

The label number need not be placed on each page. It should, however, be placed on the first page of each separate document, such as, a new application, amendment, assignment, and transmittal letter or a fee, along with the certificate of mailing by "Express Mail". Although the label number may be on checks, such a practice is not required. In order not to deface formal drawings it is suggested that the label number be placed on the back of each formal drawing or the drawings be accompanied by a set of informal drawings on which the label number is place.

Customer No.: 4955

•